

8.2 CRITERIA, STANDARDS, AND FACTORS UTILIZED TO DEVELOP TRANSMISSION ROUTE

WAC 463-42-625 Criteria, standards, and factors utilized to develop transmission route. The applicant shall identify the federal, state, and industry criteria used in the energy transmission route selection and shall identify the criteria used and the construction factors considered in developing the proposed design and shall indicate how such criteria are met.

As described in Section 2.1, 'Site Description', and Section 2.4, 'Energy Transmission Systems', one of the principal factors in selecting the proposed site for the Kittitas Valley Wind Power Project was direct access to suitable transmission lines without the need for installing long high voltage feeder lines to the point of interconnection. There are several sets of high voltage power lines which cross over the Project site including 5 sets of Bonneville Power Administration (BPA) transmission lines and 1 set of Puget Sound Energy (PSE) transmission lines. The Project will interconnect directly with the BPA and/or the PSE transmission lines near Bettas Road as indicated on the site layout contained in Exhibit 1.

The wind turbines are connected to an electrical collection system primarily through approximately 23 miles of underground cables as described in more detail in Sections 2.4, 'Energy Transmission Systems'. Two short runs of overhead, single pole 34.5 kV distribution line, totaling 2 miles, may be installed near Bettas road to tie some of the turbines in to the main substation. This results in reduced environmental impacts, fewer visual and aesthetic impacts, lower line losses and lower energy costs. The plant electrical system, including the collection system, will be designed and constructed in accordance with the guidelines of the National Electric Code (NEC), National Fire Protection Agency (NFPA) and utility requirements.